### 

**REFramework as Library**

**For power users**

* Facilitate the development of complex automations by providing the most common functionalities out-of-box:
  + Exception Handling
  + Retry & Recovery Mechanisms
  + Configuration Mechanism
  + Logging
* Compared to classic REFramework, the current implantation has the advantage of hiding the complexity of the architecture from the user, allowing him to focus specifically on the process to automate.
* Well suited for iterative, transactional processes, where the data can be split into several items (or parts)
* Built around *TransactionData* (the entire data to be processed, e.g. Orchestrator Queues, DataTables) and *TransactionItem* (chunk of data to be processed during one iteration, e.g. Queue Item, Data Row).
* Capability to generate starting workflow – ready-to-run processes
* Developer can define a process by updating a set of predefined, wizard-created workflows:
  + *InitAllApplications.xaml* – is invoked at the beginning of the execution and should be used to initializes all applications needed by the robot and to initialize the *TransactionData.*
  + *GetTransactionItem.xaml* – used to retrieve the next item to be processed.
  + *ProcessTransaction.xaml* – used to process each transaction item
  + *EndProcess.xaml* – invoked at the end of the execution, should contain final actions to be executed before the process finishes (send reports, save data, emails, etc.)
  + *CloseAllApplications.xaml* [optional]should contain actions to close all applications used by the robot
  + *HandleTransactionStatus.xaml* [optional]– the workflow is invoked after each *ProcessTransaction.xaml.* It should handle with the status of the processing, e.g. send an email in case of exception, log the status of each transaction, etc.
  + *Config.xlsx* – contains a dictionary of configurations that can be accessed in every workflow through the variable *Config.*
* Exception handling and retry mechanism:
  + Number of retries configured in config file*.*
* Predefined logging: when REFramework starts and ends, when an external workflow is invoked, when a new transaction is started.
* Powerful framework for developing automations: wizard, an user friendly interface and hiding the complexity behind a library, this framework targets users with medium experience in UiPath

**REFramework as Library**